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Papilloma / Bladder

Anderson

A Case of Papilloma of the Bladder successfully removed by operation. By WILLIAM ANDERSON.
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JAMES S., æt. 53, caretaker of a lecture-hall, was admitted into St. Thomas's Hospital on August 9, 1884, with symptoms of vesical tumour.

The first indication of the presence of vesical disease was a spontaneous attack of hæmaturia in the summer of 1872, during convalescence from a railway accident. The hæmorrhage was unaccompanied by pain or marked constitutional disturbance, and subsided at the end of a few days, leaving the patient perfectly free from symptoms for a year, when a second and precisely similar paroxysm made its appearance. This also passed away speedily, but the succeeding intermission was abbreviated to six months, and subsequently recurrence took place at fairly regular intervals about four times yearly.

In July, 1882, the man attended as an out-patient at St. Thomas's Hospital. He was then in the midst of an attack of hæmaturia, losing a considerable quantity of blood, usually fluid, and voided principally with the final contractions of the bladder, but sometimes also in the form of clots, which escaped at the commencement of the stream. There was neither pain nor increased frequency of micturition, the condition was not affected by ordinary exercise, and there were no indications of urethral obstruction. He was somewhat anæmic and debilitated, but was able to discharge the duties of his office.

The introduction of a sound into the bladder revealed on the first and subsequent occasions a peculiarly acute sensibility localised to the region of the trigone (an area afterwards found to coincide with that of the tumour), but was otherwise negative in its results. Rectal and abdominal examination gave no indications of disease, and the urine was found to contain no abnormal elements except blood-discs. Neither in the first nor in later investigations were any fragments of villi detected. The symptoms yielded at the end of ten days under the administration of perchloride of iron, and for a time the patient was restored to a fairly satisfactory state of health, but attacks of a similar character recurred again and again at

intervals of about three months, always subsiding readily under treatment and not inducing any serious loss of strength. In June, 1884, however, the disease assumed a new phase; during a paroxysm of more than usual severity symptoms of catarrh became superadded, and from this time the intermissions ceased. The hæmorrhage became less profuse at the end of a few days, but never entirely disappeared, and the urine continued to present a copious muco-purulent deposit. The patient was now tormented by hypogastric pain and irritability of the bladder, and his strength began to fail rapidly. He was advised to enter the hospital with a view to operation, but did not determine to do so until August.

On admission the local examination and the investigation of the urine were carefully repeated without obtaining any new evidence, but the symptoms were regarded as sufficiently indicative of vesical tumour to call for an exploratory operation. This was accordingly undertaken on August 14.

An incision being made through the perinæum into the membranous portion of the urethra, the finger was introduced into the bladder and at once impinged upon a soft flocculent growth involving a considerable portion of the rectal wall of the viscus. The mass extended from near the internal urinary meatus upwards for a distance of about an inch and a half, and laterally for about an inch on either side of the median line. It appeared to consist of long villous processes springing from a broad and slightly elevated base, and during



Diagrammatic view of the posterior wall of the bladder showing region involved by the tumour.

the manipulation all doubt as to the nature of the disease was set at rest by the detachment and escape of two or three slender semitransparent fragments having the usual character of papillomatous fimbriæ.

The prostatic urethra dilated under steady pressure sufficiently to allow the introduction of a pair of forceps (with long narrow straight blades and a slight bulbous extremity) into the bladder by the side of the finger, and by careful manipulation of the instrument the root of the tumour was crushed, segment by segment, and the villi twisted away until the whole of the growths appeared to have been removed. The bleeding was severe but not dangerous, and ceased spontaneously after the expulsion of a mass of clot by a powerful reflex contraction of the bladder. A drainage-tube was passed through the wound and the patient was removed to bed.

In the evening the temperature rose to 100.4° and a slight rigor occurred. The rigor returned twice on the following day, the temperature rising on the second occasion to 104° , but there was nothing alarming in the condition of the patient. Some bloody urine was passed by the urethra and a little oozing of blood took place from the wound.

For a few days after the operation the urine contained an admixture of pus and blood, and the passage of the secretion by the normal channel induced an acute pain referred to the glans penis, but these symptoms gradually disappeared and the further progress of the case was complicated only by the development of a small perineal abscess at the end of the third week, associated with febrile disturbance and rather severe rigors.

On September 10, twenty-seven days after the removal of the tumour, the patient was able to leave his bed, and on the 21st was discharged from the hospital free from all trouble save a minute fistulous opening in the perinæum and a trace of blood in the urine.

Histologically the growth was found to consist of a mass of closely aggregated processes of various lengths springing directly from the mucous membrane. Some of the fringes were long and slender, the longest reaching three quarters of an inch, others shorter and more solid, often branched, and containing a more or less considerable basis of loose connective tissue. The vessels were for the most part of large size and with thin walls. The tumour may be considered to represent a combination of the fimbriated and fibrous papillomata figured in Sir Henry Thompson's work. (See Plate VI, fig. 3.)

At the present time, nine months after the operation, the condition remains favorable. The patient is able to attend to his business, and reports himself in the enjoyment of far better health than at any time during the four years preceding the removal of the tumour. The vesical symptoms have all disappeared except the presence in the urine of a trace of blood, the amount of which, however, does not show any tendency to increase.

The necessity for watching the case is not yet at an end, but the result already gained may be considered sufficient to justify the measures adopted. The patient has been rescued from a state of imminent danger and freed from much suffering, and even should the disease recur it is not probable that the risks of a second operation will be greater than those surmounted in the first.

Remarks.—The chief points of interest in the case are the extremely slow evolution of the tumour (the symptoms having extended over twelve years) and the absence of any conclusive evidence of the nature of the disease before the digital exploration of the bladder.* Under such circumstances any operation determined upon could only be “diagnostic” in the first instance, and it is fairly certain that had surgical intervention been withheld on account of the element of doubt the patient would not now be in a position to thank us for our caution.

Dr. Poussicon (*De l'intervention Chirurgicale dans le traitement et le diagnostic des Tumeurs de la Vessie*, 1884) has had the courage to challenge not only the value of boutonnière operation in particular, but the principle of diagnostic operations in general, and asserts with some pride that it is a tradition of French surgery to entertain no operation that has not an immediately therapeutic aim. It is not worth while to argue upon the abstract value of “traditions” in medicine and surgery—we daily leave their mangled remains strewn upon the track of advancing science. But if we recognise on the one hand the impossibility of making an absolutely certain diagnosis in every case of suspected tumour of the bladder,† and in

* The peculiarly localised sensibility of the mucous membrane of the bladder at the place occupied by the tumour is perhaps of interest as a feature of diagnosis.

† This is demonstrated by the fact that no less than seventeen out of thirty-four explorations, all by experienced surgeons, have been negative in results. There is no doubt that by means of vesical injections and the use of the lithotrite as suggested by Sir Henry Thompson, the certainty of diagnosis will be greatly increased but it can never be complete in all cases.

the other the dangers attached to the later stages of the disease (from increased size of the growth, prostration due to repeated hæmorrhage, and the possibility of renal complications) it is fairly certain that the practitioner who makes it an invariable rule to delay operative interference till the pathognomonic features declare themselves is likely to offer up many victims at the altar of his tradition. I will not be bold enough to assert that Dr. Poussicon has himself proved this in the cases he quotes to illustrate his views, but it is still worthy of remark that of the four patients operated upon by Dr. Guyon by the suprapubic method two died from exhaustion within five days and a third succumbed three days after a second operation (the first having been followed by a relapse at the end of three months). It is not implied that the unhappy termination was in any of these instances attributable to the surgical procedure which was undoubtedly perfect in conception and execution, but it does appear probable that had the opportunity for a diagnostic operation been offered and accepted in two of the cases before the patients were brought to the verge of death by hæmorrhage and exhaustion, the course of events would have been very different. In one of the examples, moreover, it appears that Dr. Guyon was himself so far in doubt as to the cause of the symptoms, that he considered it necessary to qualify his diagnosis of tumour by "*quelque reserve sur la possibilité d'une cystite chronique*" (i.e., p. 153). The bladder was nevertheless opened, although it would be hard to say on what principle the operation differed from the diagnostic enterprise so sternly condemned by the traditions of French surgery.

The diagnostic efficiency of the boutonnière operation depends upon the proper selection of cases for its employment. Sir Henry Thompson states that in only one case out of twenty-seven did he experience any difficulty in making a satisfactory examination of the interior of the viscus in this manner, and as the three prohibited conditions formulated by Mr. Whitehead,—enlargement of the prostate, excessive development of fat in the perinæum, and unusual narrowness of the pelvic outlet, can be ascertained before operation, it may be assumed that the method is quite adequate for diagnostic purposes in all cases where these disadvantages do not exist; and we are at liberty to reserve the suprapubic incision for the rest, a minority of perhaps 5 per cent. Its therapeutic capabilities have been amply demonstrated by the experience of Sir Henry Thompson, Mr. Whitehead, and others. Except in four

instances it has permitted the satisfactory removal of all the tumours it has brought within the surgeon's reach, and has given marked relief to pre-existing symptoms in a certain number of cases where it has failed to reveal their cause.

It is maintained by the advocates of the high operation that the suprapubic incision confers much greater advantages for the ablation of tumours, but this has yet to be demonstrated by results, and is by no means proved even in theory. If it be borne in mind that nearly all vesical growths spring from the lower half of the viscus, and the great majority from the rectal wall, which is almost in a direct line with the axis of the prostatic urethra (Woodcut, p. 2), it will be seen that there are few cases that are not sufficiently accessible by the perineal route. There is, however, no doubt that it is less eligible for the removal of growths implicating a very extensive area, and in those which spring from the anterior or upper walls, but the latter regions are not often primarily involved, and the timely employment of perineal exploration would reduce the number of widely diffused vesical neoplasms by facilitating their discovery in the earlier stage of their existence.

The statistics of mortality are of little value, as the result of operation is so frequently complicated by extreme anæmia, renal disease, and other grave constitutional conditions sufficient in themselves to account for a fatal termination to the case. Taking the figures for what they are worth, we find in twenty-seven cases six deaths which may have been caused or accelerated by the surgical intervention. On the other hand, of eight suprapubic operations four ended fatally, one from extravasation of urine attributed to too rapid absorption of catgut ligatures of the vesical wall, the others from exhaustion within a few days of the removal of the tumour, and probably due in great part, if not wholly, to the loss of blood preceding it.

We are still to a great extent in the dark as to the ultimate results of the ablation of vesical tumours, as nearly all the more systematic operations are of very recent date, but it may be serviceable to analyse the published examples of non-malignant growth removed by surgical means, with a view to trace, firstly, the frequency of recurrence, and in cases of relapse, the duration of the interval between the operation and the reappearance of symptoms; and secondly, the length of the period of immunity in cases in which no return has been noted.

Theoretically it seems probable that a relapse would take place sooner or later in a rather large proportion of cases,

considering the exceptional difficulty that must frequently arise in ensuring the removal of every portion of the tumour by any mode of operation yet devised. Bearing in mind also the very slow development of the primary growth in many instances—extending over a long term of years—it might be expected that the signs of recurrence would occasionally be deferred until a late period, long after the apprehensions of the patient had ceased, and after the surgeon had lost sight of his case.

An examination of thirty-eight cases (male and female), in which the nature of the tumour was sufficiently indicated in the reports, shows four instances of undoubted and four of probable recurrence, all within a year of the operation; complete relief in one case for five years up to the date of record; in one for four years, in five for two years, and in four for periods ranging between fifteen and twelve months. In nineteen other cases no signs of recurrence had appeared at the time of the report, but the observations had been limited to a term of less than twelve months. There are hence as yet only eleven cases out of thirty-eight in which we possess evidence of an immunity of one year and over, against eight cases in which relapse is noted as certain or probable. We may hope, however, that the operators will at some future time favour the profession with supplementary information upon those cases which can be followed after the publication of the earlier details.

DESCRIPTION OF PLATE.

- A. General view under a low power.
- B. One of the papillæ highly magnified.





